

Title (en)

FASTENING STRUCTURE USING GAP BASE MATERIAL FOR REDUCING FRETTING WEAR

Title (de)

BEFESTIGUNGSSTRUKTUR MIT SPALTGRUNDMATERIAL ZUR VERRINGERUNG VON REIBVERSCHLEISS

Title (fr)

STRUCTURE DE FIXATION UTILISANT UN MATÉRIAU DE BASE INTERMÉDIAIRE POUR RÉDUIRE L'USURE DE CONTACT

Publication

EP 2211063 B1 20150909 (EN)

Application

EP 08764877 A 20080523

Priority

- JP 2008059958 W 20080523
- JP 2007272829 A 20071019

Abstract (en)

[origin: EP2211063A1] The present invention relates to a spacer member reducing fretting wear and fastened structures using a spacer member, furthermore, the present invention provides a spacer member 1 sandwiched between contact surfaces 7 of contact materials 6 subject to abrasion and suffering from wear and provided with sliding and vibrating surfaces 2, 2 characterized in that the sliding or vibrating surfaces (2, 2) of the spacer member 1 have a higher hardness than at least one of the contact surfaces (7) of the first contact material (6) and the second contact material (6') and the sliding or vibrating surfaces (2, 2) of the spacer member 1 have a lower coefficient of friction and a higher flatness than at least one of the contact surfaces (7) of the first contact material (6) and the second contact material (6'), whereby the sliding or vibrating surfaces 2, 2 of the spacer member 1 do not easily wear down the contact surfaces 7 of the contact materials 6.

IPC 8 full level

F16B 5/02 (2006.01); **B60B 27/00** (2006.01); **F16B 43/00** (2006.01); **F16C 33/58** (2006.01)

CPC (source: EP US)

B60B 27/00 (2013.01 - EP US); **F16B 5/02** (2013.01 - EP US); **F16B 35/042** (2013.01 - EP US)

Citation (examination)

- JP 2003147525 A 20030521 - RIKOGAKU SHINKOKAI
- DATABASE WPI Week 200355, Derwent World Patents Index; Class L03, AN 2003-581305

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2211063 A1 20100728; EP 2211063 A4 20111116; EP 2211063 B1 20150909; BR PI0818778 A2 20150414; CA 2702899 A1 20090423; CA 2702899 C 20160628; CN 101828044 A 20100908; CN 101828044 B 20130410; JP 5419701 B2 20140219; JP WO2009050914 A1 20110224; KR 101239590 B1 20130305; KR 20100055535 A 20100526; MX 2010004093 A 20100430; RU 2010119958 A 20111127; RU 2466304 C2 20121110; US 2010234255 A1 20100916; US 8481464 B2 20130709; WO 2009050914 A1 20090423

DOCDB simple family (application)

EP 08764877 A 20080523; BR PI0818778 A 20080523; CA 2702899 A 20080523; CN 200880111874 A 20080523; JP 2008059958 W 20080523; JP 2009537959 A 20080523; KR 20107008359 A 20080523; MX 2010004093 A 20080523; RU 2010119958 A 20080523; US 73849608 A 20080523